

Economic Impact of the Brewing Industry on Alaska's Economy
Prepared for the Brewers Guild of Alaska
by Southeast Strategies
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The brewing industry in Alaska brews, packages, and sells beer across the state, the nation, and the world. As a basic economic sector, the brewing industry creates jobs and income in the state that would not exist if these businesses did not decide to locate here. In 2011, the brewing industry contributed a minimum of 1,340 jobs to Alaska's economy, and generated more than \$125 million through direct spending and the multiplier effect of that spending in the state. Not only does the industry bring money into the state from export of its product outside Alaska, brewers also provide a product to meet statewide demand that would otherwise have to be imported, thus reducing the amount of money leaving Alaska.

This report estimates the economic impact of the brewing industry on the economy of Alaska. These estimates were developed using economic multipliers calculated by an economic model of Alaska, as well as results of a 2012 survey of Brewers Guild of Alaska (BGA) members. Details about the model and methodology used for this analysis are included at the end of this report.

Direct impacts to the Alaska economy from brewing industry activity include payroll, fees and taxes, rent, and owners' income paid in Alaska directly by the brewing businesses. These direct impacts for 2011 are shown in Table 1. Spending in Alaska by brewing businesses on goods and services, and spending in Alaska by workers in the brewing industry on goods and services, result in indirect and induced impacts, creating a multiplier effect. These indirect and induced impacts are shown in Table 2.

Table 1
Direct Economic Impacts to Alaska from the Brewing Industry
in 2011 Dollars

	Soft Drink			
	Breweries	Manufacturing	Brew Pubs	Total
Jobs (Full Time Equivalent)	219.0	282.2	273.3	774.5
Total Business Income	\$170,477,318	\$191,952,000	\$17,389,200	\$379,818,518
Total In-state Expenditures	\$53,348,831	\$12,230,030	\$9,930,624	\$75,509,485
Payroll & Owners Income	\$11,574,728	\$9,112,729	\$6,462,348	\$27,149,806
Fees & Taxes Paid	\$26,315,220	\$314,417	\$1,268,890	\$27,898,527
Rents & Dividends Paid	\$15,458,883	\$2,802,883	\$2,199,386	\$20,461,152
Percent Retained in Alaska	31.3%	6.4%	57.1%	19.9%

Source: Southeast Strategies, 2012. Developed using the IMPLAN econometric model of Alaska's economy in 2010, and adjusted for inflation to 2011 dollars.

The brewing industry in Alaska includes businesses that report employment and earnings under the industry categories of beer brewers, soft drink brewers, and brew pubs (eating and drinking establishments). Table 1 shows direct impacts of each industry category separately. These impacts include all businesses reporting as beer brewers, and those BGA members that report employment and earnings as soft drink brewers and brew pubs. Beer brewers reporting under soft drink brewers and brew pubs that are *not* BGA members are not included in this analysis, so in reality, the impacts are greater than this report indicates.

In addition to the direct impacts of initial spending in Alaska by the brewing industry on labor, fees and taxes, rent, and business owners' income, those companies buy goods and services from other Alaska businesses. Some of the income other Alaska businesses earn from brewery business spending becomes the indirect impact of brewery income. Also, some of the money paid by brewery businesses to their employees is spent in Alaska, and becomes the induced impacts of brewery income. The total of initial spending and subsequent respending of brewery business income creates a multiplier effect, where part of each dollar spent, is respent within the state economy. All of these impacts (payroll, fees and taxes, rents, and owners' income) consist only of money and jobs that stay within the Alaska economy. More information about how these estimates were developed is included at the end of this report.

Table 2
Indirect and Induced Economic Impacts to Alaska from the Brewing Industry, in 2011 Dollars

	Direct Impacts	Indirect Impacts (from business spending)	Induced Impacts (from worker spending)	Total Impacts
Jobs (Full Time Equivalent)	774.5	322.3	243.2	1,340.0
Total Business Income	\$379,818,518	\$54,903,482	\$31,462,080	\$466,184,081
Total In-state Expenditures	\$75,509,485	\$31,783,271	\$19,561,873	\$126,854,629
Payroll & Owners Income	\$27,149,806	\$18,507,262	\$10,360,818	\$56,017,885
Fees & Taxes Paid	\$27,898,527	\$2,932,053	\$1,925,423	\$32,756,003
Rents & Dividends Paid	\$20,461,152	\$10,343,956	\$7,275,632	\$38,080,741
Percent Retained in Alaska	19.9%	57.9%	62.2%	27.2%

Source: Southeast Strategies, 2012. Developed using the IMPLAN econometric model of Alaska's economy in 2010, and adjusted for inflation to 2011 dollars.

There are other ways that the beer brewing industry in Alaska contributes to the well being of the state than just those mentioned above. The brewing industry in Alaska is a good community member, and donates cash, beer, and merchandise to local and statewide causes and organizations. Some brewing entities in Alaska win national and international awards, and bring acclaim to Alaska and its brewing industry. In addition, some brewers in Alaska advertise outside the state, showcasing Alaska and its residents to the nation and the world.

Methodology

In order to determine the 2011 impact of the brewing industry on the economy of Alaska, Southeast Strategies followed the methodology outlined here. The most current full year of information available for all variables considered for these estimates was used to capture as close to a current (2011) estimate as possible. Where actual 2011 data were not available through the economic model used for this analysis, dollar amounts were adjusted for inflation to reflect 2011 dollars.

Brewing industry employment information was fed through a well known economic model (IMPLAN) calibrated to fit Alaska's economy to determine secondary impacts of initial spending in the state. The IMPLAN (IMPact analysis for PLANning) model is a community and regional level input/output model initially developed by the U.S. Forest Service in cooperation with the Federal Emergency Management Agency, and the U.S. Department of the Interior, Bureau of Land Management to assist the Forest Service in land and resource management planning. The model uses data about employment, income, and various other indicators to determine how direct economic impacts will produce multiplier effects (indirect and induced economic impacts) within Alaska.

The brewing industry in Alaska reports its earnings to the Alaska Department of Labor and Workforce Development (DOL) under several different industry codes. Some businesses report as brewers of alcoholic beverages, some report as soft drink manufacturers, and brewpubs report as eating and drinking establishments. The BGA surveyed its membership in 2012 to determine employment, revenues, and expenditures. Because the IMPLAN model uses DOL data, this analysis also groups the employment reported to the BGA in the industry categories under which the individual businesses are reported to DOL.

Not every brewing business in Alaska belongs to the BGA. The BGA survey of its members showed about 149 employees in businesses reporting as brewers of alcoholic beverages. The DOL reported 219 employees in that industry in 2011, and this analysis uses the full DOL employment figure. Because it is difficult to estimate employment of those non-BGA businesses that brew beer but report employment and earnings under the soft drink manufacturing and restaurant industry categories, this analysis uses only employment by BGA members in those two categories. It is important to note that economic impact of brewers reporting in these two categories is an undercounting of the actual impact, because non-BGA brewers reporting in these categories are not considered. Consequently, the economic impact reported here should be considered a minimum impact.

The level of impacts in Alaska from brewing activities are calculated in terms of jobs, earnings by workers and business owners, state and local taxes and fees paid, and rents and dividends paid. These impact categories are defined below:

- **Jobs (Full Time Equivalent)** – Total number of jobs created by impacted businesses as a result of the brewing activity in Alaska. Jobs are counted as the equivalent of full-time, year round jobs.

- **Total Business Income** – The total income received as a result of the brewing activity in Alaska.
- **Payroll & Owners Income** – Total wages and salaries paid to employees, and payments received by business owners as income as a result of the brewing activity in Alaska.
- **State and Local Fees & Taxes** – Total sales, property, and other state and local taxes paid, as well as state and local fees and commissions paid as a result of the brewing activity in Alaska.
- **Rents & Dividends** – Total rental payments, royalties, and dividends paid as a result of the brewing activity in Alaska.
- **Total In-state Expenditures** – The sum of payroll and owner’s income, state and local fees and taxes, and rents and dividends. This represents expenditures in Alaska as a result of the brewing activity in the state.
- **Percent Retained in Alaska** – The percent of total business income that is spent in Alaska (in-state expenditures) as a result of the brewing activity in the state.

Impacts to an economy result either from direct spending or through multiplier effects, and are defined below:

- **Direct** impacts are primary impacts in the state created by direct spending of brewers on payroll, fees and taxes, rent, and business owners’ income. Spending in the state for other goods and services by brewers is considered under indirect impacts.
- **Indirect** impacts are secondary impacts created by additional spending in the state by **businesses** earning revenue directly from in-state brewing activity. These impacts take the form of payroll, fees and taxes, rent, and business owners’ income.
- **Induced** impacts are secondary impacts created by additional spending in the state by **households** earning income (usually as wages and salaries) directly from in-state brewing activity. These impacts take the form of payroll, fees and taxes, rent, and business owners’ income.